

## WHAT IS CLAIMED IS:

16. A capsule to hold and store a pharmaceutical formulation for oral inhalation in a powder inhaler consisting of a capsule body and a capsule cap that can be attached together telescopically so that the cap is attached solidly to the body while enclosing a hollow space for holding the powdered pharmaceutical preparation and the capsule body and the capsule consisting of a synthetic material, being water-insoluble, hydrophobic, not digestible by humans and having a Shore hardness D in the range from 65 to 73.
17. The capsule according to claim 16, characterized in that the walls of the cap and the body are 0.1 mm to 0.5 mm thick.
18. The capsule according to claim 16, characterized in that the capsule can withstand a force acting upon its longitudinal axis and its transverse axis of up to 15 N.
19. The capsule according to claim 16, characterized in that the wall of the capsule has a steam permeability of less than  $1.3 \times 10^{-14}$  kg/(m<sup>2</sup> s Pa).
20. The capsule according to claim 19, characterized in that the wall of the capsule has a steam permeability of  $1.5 \times 10^{-16}$  to  $2 \times 10^{-16}$  kg/(m<sup>2</sup> s Pa).
21. The capsule according to claim 16, characterized in that the synthetic material is polyethylene, polycarbonate, polyester, polypropylene or polyethyleneterephthalate.
22. The capsule according to claim 21, characterized in that the synthetic material is polyethylene with a density of 9000 - 10,000 kg /M<sup>3</sup>.
23. The capsule according to claim 16, characterized in that one or more elevations or recesses are located on the inner jacket of the cap and one or more recesses or elevations are located on the outer jacket of the body, these elevations or recesses being arranged so that the elevations engage with the recesses when the capsule is closed.
24. The capsule according to claim 16, characterized in that a bulge runs in an annular shape around the outside of the body perpendicular to the connecting axis of the cap and the body, the side of the bulge which is orientated towards the open end of the body standing practically at right angles to the outer wall of the body.
25. The a capsule according to claim 16, characterized in that the capsule body and capsule cap are both made of high density polyethylene and are both in the shape of a cylinder of round cross section with a convex closed end, so that the elongation of the capsule is greater than 1.

26. The capsule according to claim 16, characterized in that the joint between the body and cap, or the gap, is sealed by welding, adhesive bonding, wrapping or covering the cap with a protective film.
27. The capsule according to claim 16, characterized in that the joint between the body and cap, or the gap, is sealed by filling with a pharmaceutically acceptable filler.
28. The capsule according to claim 27, characterized in that the filler is an Acrylresin. *TRADE NAME*
29. The capsule according to claim 16; the capsule having a steam permeability of less than  $1.3 \times 10^{-4}$  kg/(m<sup>2</sup> s Pa), the synthetic material being selected from the group of polyethylene, polycarbonate, polyester, polypropylene or polyethyleneterephthalate.
30. The capsule according to claim 16 which holds and stores a pharmaceutical preparation selected from cromoglycic acid, reproterol, beclomethasone, terbutaline, salbutamol, salmeterol, ketotifen, orciprenaline, fluticasone, ipratropium, dexamethasone, bambuterol, tiotropium, budesonide, fenoterol, clenbuterol, prednisolone, prednisone, prednylidene, methylprednisolone, formoterol, nedocromil, insulin, ipratropium bromide, tiotropium bromide, the salts or mixtures thereof or another cortisone preparation or atropine derivative.